

REMARKS

At the outset, the Examiner is thanked for the review and consideration of the pending application. The Office Action dated May 7, 2010 has been received and its contents reviewed. Reconsideration of the pending application is respectfully requested in view of the following observations.

1. Amendments and Support for Same.

By this Response, claims 28, 29, 32, 33, 44, 45 and 48 are hereby amended to correct for informalities. No new matter is added. Claims 1-20 have previously been cancelled; claims 51-54 are hereby newly added. Support for new claims 51-54 is found at Figures 4, 5 and 9 and Specification page 6, line 16 to page 7, line 24, page 12, lines 4-14 and page 11, line 25 to page 12, line 1. No new matter is entered. Accordingly, claims 21-54 are currently pending.

2. Claims 21, 22, 26-37, 39, 40 and 43-50 are rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent Application Publication 2004/0030934 (Mizoguchi et al.).

The rejection of claims 21, 26, 28, 30, 32, 34 and 36 as anticipated by Mizoguchi has been carefully considered but is most respectfully traversed.

It is urged that Mizoguchi fails to anticipate the claimed invention because Mizoguchi fails to disclose, "wherein the procedure of selecting the key images is not displayed on the image table in the screen of the terminal."

In rejecting claim 21, the Examiner refers to Mizoguchi paragraph [0013] for a teaching of 'the procedure of selecting the key images is not displayed on the image table in the screen of the terminal.'

However, the Examiner's interpretation of Mizoguchi is not corrected.

The main feature of Mizoguchi's invention set forth in the paragraph [0013] is to select images that are relatively easy to memorize, instead of a password such as a character or numeric (alphanumeric) difficult to memorize, and change them to their corresponding characters or numeric values. Thus, the characters or numeric values corresponding to the images are designed to be visible (the oracle embodiment) or invisible (the automated version), but the process of selecting images is visible.

The step of changing images to characters or numeric values is invisible. *However, since the process of selecting images is implemented by moving a cursor over the image and clicking on it using a mouse as can be seen from the detailed description (see paragraphs [0035] and [0036] of Mizoguchi), the process of manipulation or selection may be easily known if others watch the Mizoguchi process.*

Mizoguchi's invention in which the process of selecting a key image is visible to the eye is different from the present invention in which the process of selecting a key image cannot be visible to the human eye.

In the present invention, the feature that 'the process of selecting a key image cannot be visible to the human eye', is explained in the following two embodiments by way of non-limiting example.

The first embodiment is a case in which the entire image tables are moved together. In this case, since the entire image tables are moved together, the process of selecting a key image is invisible.

Please refer to the page 6, line 16 to page 7, line 24 of the Specification.

FIGS. 4 and 5 show another embodiments of the authentication method by the input of coordinates. This method employs key coordinates and key images. In this method, if a user hits a predetermined key image to a predetermined key coordinate, authentication is successful.

For example, it is assumed that key coordinates of a user are (4, 2), and a key image is a heart pattern 1. (4, 2, heart pattern) is recorded in the user's personal information DB of the server as second authentication information. In the server, all the patterns are randomly mixed and an image table as shown in FIG. 4 is transmitted to the user's terminal. At this time, (2, 3), which is the position of the key image 1 of the image table in which all the patterns are randomly mixed, is recorded. The user inspects closely where the heart pattern 1 being his the key image shown on the screen is located, and then controls a direction key so that his heart pattern 1 is located in the key coordinates (4, 2). In FIG. 4, since the heart pattern 1 is (2, 3), if the right direction key is pressed twice and a down direction key 1 is pressed once, the entire images are shifted in the direction of the direction key. Thus, the heart pattern 1 located at (2, 3) is located at (4, 2), as shown in FIG. 5. If the enter key is pressed, authentication is successful. According to the manipulation of the direction key, the

server continues to shift (2, 3), compares coordinates immediately before the enter key is inputted with the key coordinates, and if they are the same, considers that authentication is successful. In this method, a total of 25 images are shifted together. Thus, it is very difficult to know which image corresponds to which coordinates although others behind sees the screen. Moreover, although manipulation information of the direction key is stolen, authentication will not be successful only with the same method because the key image is located at a different position next time. In this case, the shift rule is a method in which an image located at the end in the traveling direction like 1-2-3-4-5-1 is shifted toward a first position of the direction.

The second embodiment is a case in which the entire image tables are not moved together.

This can produce the same effect by manipulating a direction key although the entire images are not moved at all. In this case, the user memorizes that the pointer is drawn over a key image and selects the key image by moving the pointer in his mind together to the key coordinates according to the manipulation of the direction key.

Please refer to the page 12, line 4 to page 12, line 14 of the Specification.

In the embodiment of FIG. 9, if a passage rule is a 2 point passage type starting from a key image, and a key image, a through coordinate image and a terminal coordinate image are beer, a soccer ball and television, a sentence for memorizing can be "Watch a soccer relay while drinking beer". In the example shown in FIG. 9, a distance from beer to the soccer ball is one box downwardly, and a distance from the soccer ball to television is two boxes to the right and one box upwardly. A total manipulation process is "a down direction key once, enter, a right direction key twice, and an up direction key once, enter".

At this time, the initial location exists on the first key image and the pointer is not displayed on the screen. However, because the rightful user memorizes its own first key image, the user can recognize that the pointer is located on its own first key image.

Please refer to the page 11 line 25 to page 12 line 1 of the Specification.

That is, if the images are moved, the pointer is also moved, but if the images are not moved, the pointer is not moved. Thus, others who see it from the side do not which image is manipulated.

The above-described Mizoguchi's invention introduces a method of selecting the key image by moving a cursor and clicking on it over the mouse. This method allows others to know which password is inputted to the LCD device if they watch the input process.

In contrast, the present invention is characterized in that the process of selecting a key image from the image table is neither displayed nor outputted.

Please refer to the page 11 line 7 to page 11 line 19 of the Specification.

The above-described methods of FIGS. 4 and 6 correspond to a method in which the process of hitting the key image is safe although others steal a glance at it. In order to accomplish the object, first, a key image and key coordinates (or a second key image arranged within a second image table) that must correspond to its key image must be known to a user himself. Second, when the position of the key image is manipulated, all other images are manipulated at the same time in the same direction and as long as the same distance. Thus, although others watch it, they do not know which image is manipulated. Since the arrangement of image tables is differently presented every time, authentication is unsuccessful only with the same manipulation value although the manipulation value is known.

Therefore, Mizoguchi's invention is different from the inventions of claims 21, 26, 28, 30, 32, 34 and 36 and of the present application.

Accordingly, because Mizoguchi does not anticipate the claimed invention, the rejection of claims 21, 26, 28, 30, 32, 34 and 36 should be withdrawn.

The rejection of claims 22, 27, 29, 31, 35 and 37 as anticipated by Mizoguchi has been carefully considered but is most respectfully traversed.

Claims 22, 27, 29, 31, 35 and 37 claim similar limitations as those of claims 21, 26, 28, 30, 32, 34 and 36. For all of the above reasons advanced with respect to the patentability of claims 21, 26, 28, 30, 32, 34 and 36, claims 22, 27, 29, 31, 35 and 37 are believed patentable over Mizoguchi and the rejection of claims 22, 27, 29, 31, 35 and 37 should therefore be withdrawn.

The rejection of claims 39, 43, 44, 46 and 49 as anticipated by Mizoguchi has been carefully considered but is most respectfully traversed.

Claims 39, 43, 44, 46 and 49 claim similar limitations as those of claims 21, 26, 28, 30, 32, 34 and 36. For all of the above reasons advanced with respect to the patentability of claims 21, 26, 28, 30, 32, 34 and 36, claims 39, 43, 44, 46 and 49 are believed patentable over Mizoguchi and the rejection of claims 39, 43, 44, 46 and 49 should therefore be withdrawn.

The rejection of claims 40, 45, 47, 48 and 50 as anticipated by Mizoguchi has been carefully considered but is most respectfully traversed.

Claims 40, 45, 47, 48 and 50 claim similar limitations as those of claims 21, 26, 28, 30, 32, 34 and 36. For all of the above reasons advanced with respect to the patentability of claims 21, 26, 28, 30, 32, 34 and 36, claims 40, 45, 47, 48 and 50 are believed patentable over Mizoguchi and the rejection of claims 40, 45, 47, 48 and 50 should therefore be withdrawn.

3. Claims 23-25, 41 and 42 are rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent Application Publication 2004/0030934 (Mizoguchi et al.) in view of United States Patent Application Publication 2004/0185869 (Lee et al.).

The rejection of claims 23-25, 41 and 42 as unpatentable over the combination of Mizoguchi and Lee has been carefully considered but is most respectfully traversed.

The deficiencies of Mizoguchi have already been addressed.

Lee is believed not to remedy the deficiencies of Mizoguchi.

The rejection of claims 23-25, 41 and 42 as dependent upon their respective independent claims should therefore be withdrawn.

4. Claim 38 is rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent Application Publication 2004/0030934 (Mizoguchi et al.) in view of United States Patent Application Publication 2004/0153665 (Browne).

The rejection of claim 38 as unpatentable over the combination of Mizoguchi and Browne has been carefully considered but is most respectfully traversed.

The deficiencies of Mizoguchi have already been addressed.

Browne is believed not to remedy the deficiencies of Mizoguchi.

The rejection of claim 38 as dependent upon independent claim 21 should therefore be withdrawn.

5. New Claims.

New claims 51-54 are added for further patent protection and for further scope. It is believed that claims 51-54 are patentable over the current references of record.

6. Conclusion.

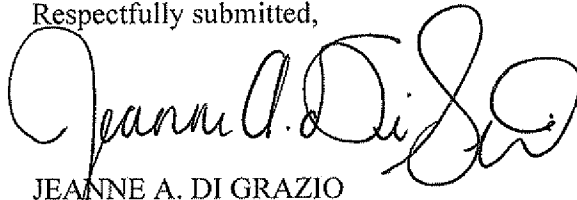
As a result of the amendment to the claims, and further in view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is respectfully requested that every pending claim in the present application be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's attorney, the Examiner is invited to contact the undersigned at the numbers shown below.

BACON & THOMAS, PLLC
625 Slaters Lane, Fourth Floor
Alexandria, Virginia 22314-1176
Phone: (703) 683-0500
Facsimile: (703) 683-1080

Date: November 8, 2010

Respectfully submitted,



JEANNE A. DI GRAZIO
Attorney for Applicant
Registration No. 58,633